

ABSTRACT

IMAGE REJECT CIRCUIT

5           An image reject circuit comprises a local  
oscillator 26 for producing a local oscillator signal.  
A tunable phase shifting network 29 has inputs 1, 3 for  
receiving the local oscillator signal and producing an  
output in-phase (I) signal 13, 25 and an output  
10          quadrature (Q) signal 15, 27. A first amplitude  
detector 33 determines the amplitude of the output I  
signal, while a second amplitude detector 35 determines  
the amplitude of the output Q signal. A comparator 37  
determines the difference between the amplitudes of the  
15          output I and Q signals, to produce a tuning signal for  
tuning the phase shifting network 29 to bring the  
difference between the amplitudes of the output I and Q  
signals towards a desired level. Preferably, the  
20          tunable phase shifting network 29 (shown in Figure 4)  
comprises a combination of tunable capacitive,  
resistive and inductive elements.

*Figure 3 to accompany abstract*